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| 09/756,420 | 01/08/2001 | Eiichi Hayashi | MOC03 P363 | 5450 |

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EXAMINER

LEE, CHEUKFAN

ART UNIT PAPER NUMBER

2622

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/756,420

Applicant(s)

HAYASHI ET AL.

Examiner

Cheukfan Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-15 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 08 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Claims 1-15 are pending. Claim 1 is independent.
2. Claims 2, 5, 6, 8, 9, and 11-15 are objected to because of the following minor error:

In claim 2, "the stop means" should read "the stop" to be consistent with the basis "a stop" set forth in claim 1.

Claims 5, 6, 8, 9, and 11-15 are objected to as being dependent upon claim 2.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (U.S. Patent No. 5,769,515).

Regarding claim 1, Chang discussed in the description of the prior art a scanner carriage (chassis A) securing structure (Fig. 1, col. 1, lines 12-35). The chassis A has a lamp set for illuminating a document being scanned by moving the lamp set and other elements within the chassis. The scanner has a casing having a plate C. The structure comprises a stop (knob G, screw with thread F) which is captively coupled to the plate C of the casing for movement with respect to the plate C. The structure further comprises an engagement member (screw hole B) provided in the carriage A. The stop (G, F) and

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the engagement member B are engaged with each other so that the carriage A is secured and are disengaged with each other during document scanning.

Chang differs from the claimed invention in that Chang's plate C is a side wall plate such that the screw (F) from the side wall plate engages the screw hole B provided at the side of the carriage A, while the plate of the claimed invention is a bottom plate such that the bottom. However, one of ordinary skill in the art would have recognized the benefit of providing the screw and knob at the bottom plate of the casing for engagement with a hole provided at the bottom of the carriage A, which is to save space in the horizontal direction (as viewed Fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to couple the knob and screw (stop) to the bottom plate of the scanner case and to provide the screw hole B (engagement member) at the bottom of the carriage A in order to reduce the amount of space occupied in the horizontal direction.

Regarding claim 2, the stop is a threaded screw, and the engagement member B is a threaded socket into which the screw is threaded.

Regarding claims 7 and 8, the carriage (chassis A) of Chang is a full-rate carriage, according to the list of components within the carriage (col. 1, lines 13-15).

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (U.S. Patent No. 5,769,515) in view of well known art.

Regarding claim 3, the screw of Chang discussed for claims 1 and 2 is a male screw. Though Chang does not disclose specific features of the screw, including a

guiding portion at the tip portion thereof, and specific feature of the socket, including a concave wall of the socket, such claimed specific features are not novel but well known in the art for providing easy engagement and disengagement of the screw and socket. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a screw and socket with the claimed features to provide easy engagement and disengagement of the screw and socket as is known in the art.

6. Claims 6, 9 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (U.S. Patent No. 5,769,515) in view of well known art and Applicant's admitted prior art.

Regarding claim 6, 9, and 12, Chang in view of known art discussed for claim 3 above does not employ a half-rate, or both a half-rate carriage and a full-rate carriage, as claimed. The carriage A of Chang is a full-rate carriage, according to the list of components within the carriage (chassis, col. 1, lines 13-15).

Although Chang does not specifically disclose employing a half-rate carriage, a scanner having a half-rate carriage and a full rate carriage is discussed on page 1 of Applicant's specification as prior art. One of ordinary skill in the art would have realized that the structure of Chang is applicable not only to the full-rate carriage but also to a half-rate carriage as well. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the structure of Chang in view of well known art discussed for claim 3 for securing a half-rate carriage in a scanner having a half-rate carriage and a full-rate carriage in order to secure the carriage(s).

Regarding claim 13, Chang et al. further discloses a ring (I) for preventing the knob G (and thus the screw) from falling off from the case C (Fig. 1, col. 1, lines 30-32). That means the knob and thus the screw are captively held to the case plate C by the ring.

Regarding claim 14, the knob G (Fig. 1) reads on the claim screw head. Further, a compression spring H extends between the case plate C and knob (head of the screw).

Regarding claim 15, the head of the screw of Chang is the knob G, which is knurled.

7. Claims 4, 5, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (U.S. Patent No. 5,769,515) in view of Applicant's admitted prior art.

Regarding claims 4, 5, 10, and 11, the carriage A of Chang is a full-rate carriage, according to the list of components within the carriage (chassis, col. 1, lines 13-15). Although Chang does not specifically disclose employing a half-rate carriage, a scanner having a half-rate carriage and a full rate carriage is discussed on page 1 of Applicant's specification as prior art. One of ordinary skill in the art would have realized that the structure of Chang is applicable not only to the full-rate carriage but also to a half-rate carriage as well. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the structure of Chang discussed above

for securing a half-rate carriage in a scanner having a half-rate carriage and a full-rate carriage in order to secure the carriage(s).

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chang (U.S. Patent No. 6,529,294) discloses a securing device for a scanner.

Thelen et al. (U.S. Patent No. 5,767,977) discloses an apparatus for a carriage latch and power cord lock-out system for an optical scanner.

Peng (U.S. Patent No. 6,305,676) discloses a buckling device of a scanner head.

Lee (U.S. Patent No. 6,700,717) discloses a scanning apparatus and locking device of the apparatus.

Lu (U.S. Patent No. 6,450,727) discloses an automatic locking apparatus for a movable module in a device.

Tseng (U.S. Patent No. 5,973,866) discloses a locking device of locking a scanning module in a scanner.

Tseng (U.S. Patent No. 6,247,374) discloses a locking mechanism for automatically immobilizing a carriage of a scanner at a rest position.

Yeh (U.S. Patent No. 6,402,034) discloses a locking device for a scanner.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheukfan Lee whose telephone number is (703) 305-4867. The examiner can normally be reached on 9:30 a.m. to 6:00 p.m., Mon-Fri.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cheukfan Lee
September 15, 2004



Cheukfan Lee